

A PROVISIONAL HISTORY OF *STRANGALIA (PEDOSTRANGALIA) REVESTITA* (L.) (COL.: CERAMBYCIDAE) IN ENGLAND

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STRANGALIA REVESTITA is a very, very rare British Longhorn beetle. It is also a very odd one. It shares one characteristic with the crepuscular Weaver Beetle *Lamia textor* L. – elusiveness; but unlike the latter, which is furtive and secretive, and has not been seen in this country for over forty years, it is diurnal, prefers hot sunshine, and may be described as almost flamboyant by nature, for it is brightly coloured – red head, pronotum and legs, black elytra with a metallic blue sheen and, more often than not turns up quite unexpectedly like a jack-in-a-box on open land (Kaufmann, 1992). This happens so infrequently – three examples since the third year of the Great War (1917) at approximately quarter-century intervals in 1945, 1971 and most recently 1996 – that this has led, in a sense, to its own protection, for it is not on the vulnerable/at risk list (Shirt, 1987). The subfasc female in contrast is even more rarely encountered; there are hardly any examples in our museum collections.

This, however, is to anticipate.

Strangalia revestita is an indigenous insect which must have been known to our entomologists at least as early as the penultimate decade of the 18th century, for it is depicted by Martyn (1792, pl. 27, f.1). In 1802, Marsham describes it precisely, habitat unknown, a specimen being “In mus. D. Beckwith”. Furthermore, he also accounts for *Leptura (Strangalia) fuscicornis*, a description which adequately fits the female, although this has since been synonymised with the var. *rubra* Geoffr. (Daniel, 1904; Aurivillius, 1912; Villiers, 1978). Marsham’s *L. fuscicornis* was “In mus. D. Lewin”. *S. revestita* is referred to briefly by Turton (1806); Samouelle (1819) merely gives July as the month in which it occurs. This is rather late as the beetle more usually chooses to appear in June.

S. revestita has always been a scarce native, but the published evidence shows that it was slightly less uncommon during the early part of the 19th century, a period of which collectors took full advantage to comb its few known haunts in Berkshire, Cambridgeshire and Kent, for by early Victorian times it was already a rare and prized specimen.

The sexes are dimorphous, the bulkier female being overall yellowish-brown superficially and black underneath. Something of a rôle reversal, at least among our Cerambycids, as, for example, with *Strangalia melanura*, it is the female which is generally more brightly red and, where *Leptura rubra* and *L. sanguinolenta* are concerned, it is the male which is yellowish and the female red. Stephens (1831, 1839) distinguishes between the sexes as does Fowler (1890). Planet (1924) figures both, but unfortunately, a printer’s error has transposed the sex legends.

Stephens (*op. cit.*) possessed “specimens of this rare species, which were captured in Coombe-wood, and others found in the vicinity of Windsor”. There are four of these beetles in his collection, one of which is a female. He adds that *S. revestita* was once taken by Rev. L. Jenyns in Gamlingay ([Cambs.] – this example is still extant) and two other localities where it was found, namely “Near Colney-hatch-wood – Mr A. Ingpen” (Middlesex) and “Windsor – Dr (W.E.) Leach”. These data are summarised in Stephens’ later work (1839), which adds “Flowers & c. ... 6.”(June). John Curtis in his 1837 catalogue, evidently had a specimen of British origin in his collection, number 415 - 1.

Coombe Wood, Surrey, a favourite collecting ground of Stephens and so often referred to by him, still exists, albeit greatly reduced and fenced in, now forming part of a golf links situated south of Coombe Lane, precisely as Stephens (1831) stated: “. . . in the lane behind Coombe-wood leading from Kingston to Merton”.

S. revestita, a singleton, was beaten from an oak in June, 1843 at Hainault, Essex (Norman, 1844); this record is of some significance, as will be later explained, as is another record of the beetle, found in similar circumstances the following century near Ringwood, Hampshire. Nothing more is heard of this insect until twenty years later when another was captured at Darenth, Kent, in June 1862 by J. Scott (Rye, 1863). There is an existing example simply labelled “E.C. Rye” in one museum collection, but nothing further to indicate that it is a Scott specimen from the above locality. On the other hand, the latter was fortunate enough to find a few more *revestita* in the Darenth Woods and they have found their way through purchase by Jansons into other collections, including one example marked “J. Scott” which circumstances imply that it, too, was taken in Darenth (Allen, 1972).

There is a short description of this beetle in Cox (1874) noting its variability in coloration and that it is rare. Turning now to Fowler (1890), sexual characteristics are detailed only as to the antennae, together with comments on the differing colour forms. He adds, “On flowers; very rare” and then repeats the information given by Stephens (1831, 1839), and these additional localities: Birch Wood (Kent), (S. Stevens) – an example from there has been traced, but captured by F. Smith – and Darenth Wood (S. Stevens). Fowler states further that there is one specimen without locality in Dr Power’s collection. There are in fact no less than four, all *sine datis* in that collection.

Canon Fowler’s own collection contains a single specimen of *S. revestita* bearing an encrypted label, “7.91”; unfortunately, he left no key to this code, but an educated guess suggests that the numerals refer to the date – July, 1891. Nevertheless, one must be wary of making what might be a fallacious assumption, witness Waterhouse’s purchases (*infra*), also numbered similarly, but for which the latter left some detailed notes.

Nothing more is heard of this still enigmatic British species until this century when P. Harwood captured one from off a flower-head on 20 June 1909 in Harewood Forest, near Andover, Hants. (Rowland-Browne, 1910; Kaufmann, 1948; Allen, 1972). A record of the above capture is repeated by Fowler (1922), who at the same time published another new record for the beetle, found in June 1917 in the New Forest by C. Gulliver (Kaufmann, 1948; Allen, 1972). In fact, A. Ford, the dealer/collector, had already taken *S. revestita* in June 1908 in the Burley Woods, Ringwood, Hants., by beating it off oak; his specimen has been traced (see below).

There are two data-less examples, representing each sex, in the Dale collection, "both much broken", according to Walker (1932). However, a recent examination in 1996 of this pair reveals that they are in better condition than the late Commander Walker wrote.

Donisthorpe (1939) states that the beetle was found in Windsor Forest by T. Desvignes, an eminent entomologist, whose collections were sold at one of the Stevens auctions in 1868. It was reputedly bought by E.W. Janson, according to a member of the family, and then re-sold to that great Coleopterist, George Crotch. When in turn Crotch's huge collections were sold, it supposedly found its way into the Cambridge or Oldham collections. It is in neither, although both museums acquired portions of Crotch's materials, and has not been traced. Crotch certainly bought several *S. revestita* at one time or another, for these are to be found in other hands, but the Desvignes record raises some doubt as to its authenticity.

At this point it is appropriate to discuss the place-name, Coombe, which occurs in many counties, and its association with Henry Harding of Dover, a contemporary of Stephens, the Dale family and many other famous Coleopterists to whom he sent beetles, represented in a number of collections. Stephens differentiates between Coombe Wood and Coombe, at present a built-up part within the administrative area of Malden, Surrey, a few miles south-west of the Wood; but there is another Coombe, in East Kent, within the rural district of Eastry, some miles north of Dover and where Harding may well have collected, for he was active in these surroundings. An example of *S. revestita* taken by Harding, but unfortunately lacking details, was bought by O.E. Janson at a Stephens sale in 1873; it has been found. It is tentatively suggested that this specimen is a Kent rather than a Surrey one.

After 1917 there is a long silence before *revestita* emerges literally once more into the daylight. The story has been told before (Allen, 1972; 1993), but it is so amusing that it bears repetition. On 17 June 1945, the Rev. C.E. Tottenham was sweeping the verges of a lane in Croydon cum Clapton, Cambs., not far from Gamlingay (where Jenyns had found it in the Spring of 1829), watched – and perhaps questioned – by a boy. Rev. Tottenham, no doubt slightly exasperated by his onlooker, handed his net to him, telling him to try his luck further down the lane. This the boy did, returning

presently to hand back the sweep net, and, behold, crawling up its side intent upon escape was a female *S. revestita*. Beginner's luck, indeed! This specimen was later presented to the Natural History Museum.

At some time during the early 1950s a collector was credited with the capture of this species in White Wood, Everton, Beds. (Driscoll, 1977; Harding, 1978; Hyman & Parsons, 1992). This is an erroneous record, recently confirmed as such in writing by the person in question, and hence is to be deleted from the distribution lists.

In June 1971, Mr G.E. Woodroffe caught a single *revestita* walking along a sandy heathland track on Hankley Common, near Thursley, Surrey (Allen, 1972; Kaufmann, 1988, 1992). This is not the only occasion that the beetle has shown itself well in the open and, as will be explained, is of some significance.

Lastly, a male of this extraordinary *Strangalia* was found at midday in June 1996 crawling along some bare ground in parkland near Coventry, Warwickshire by Dr T.G. Forsythe. The find confirms an irretrievable pre-1947 record from the county (Kaufmann, 1948; Allen, 1972; Forsythe, 1997).

Other British examples of *S. revestita*, not dealt with above, will be found in the annotated summary.

Earlier, reference has been made to numbered codes, which apply, for instance, to a specimen marked "23.62" in the G.R. Waterhouse collection and would be wrongly interpreted as being a precise date. It is a sequential number indicating the acquisition of a number of beetles, subsequent to a purchase from a J.A. Brewer (another contemporary), who had bought certain lots at a Stevens auction in the 1860s. This small collection contained a single *S. revestita*, data-less, but as Brewer lived in Reigate, it is conceivably a Surrey beetle. There is a second specimen in the collection, more clearly defined in Waterhouse's notebooks, again bought off Brewer in March 1863, who had similarly acquired it at a Stevens sale that month. As is so often the case with many of these earlier captures it is frustrating that data labels have disappeared or that locality records cannot be found.

Strangalia revestita is listed in all the British catalogues published since 1819 as a native beetle save, strangely, in the Waterhouse Pocket Catalogue of 1861 – of all people – for he names it as an indigene in his earlier Catalogue of 1858, and by Beare and Donisthorpe's Catalogue of 1904, who omit it altogether.

The life history and bionomics of the insect are still unknown in this country and, indeed, that was the case abroad until the mid-1980s (Hellrigl, 1986). Beyond finding the imagines, the larval and pupal stages remained a mystery (Duffy, 1953; v. Demelt, 1966; Villiers, 1978; Klausnitzer and Sander, 1981). Duffy (1953) suggested that the host plant was *Prunus avium*, echoed by Hickin (1987). There is a host of others (Bense, 1995), and a short list of flowers visited by the perfect insect, although it is not a true florivore,

such as *Cornus*, *Crataegus* and *Rosa canina*. Villiers (1978) also gives umbellifers, those strongly-scented plants so favoured by the genus *Strangalia*, but Hellrigl (*op. cit.*) categorically denies this in his experience – and he should know, he collected hundreds of the species!

The males always outnumber the females in the ratio 4:1 and since both sexes largely frequent the canopies of their host trees, this may explain their rare incidence – at least with us – at ground level. *S. revestita* has become rarer and more localised on the Continent (Freude, Harde and Lohse, 1966; Villiers, 1978; Klausnitzer and Sander, 1981), but remains widespread, ranging from Scandinavia, throughout the Mediterranean countries and as far east as Transcaucasia (Bense, 1995). The many different colour forms displayed more particularly by the male are both illustrated (Bijiaoui, 1986) and described (Daniel, 1904; Aurivillius, 1912). Villiers (1978) names no less than sixteen varieties.

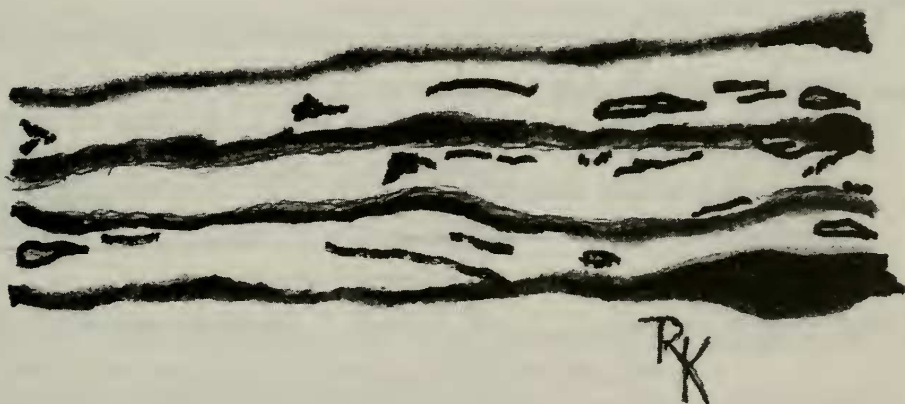


Fig. 1. Small stripped oak branch with enveloping scar healing tissue.

S. revestita has been recorded from the following host trees: beech (*Fagus*), birch (*Betula*), elm (*Ulmus*), hornbeam (*Carpinus*), maple (*Acer*), oak (*Quercus*), plum (*Prunus*), poplar (*Populus*), sour cherry (*Prunus avium*), sweet chestnut (*Castanea*) and walnut (*Juglans*), not to mention some other growths unlikely to be found in this country. It is the considered view that of all the above trees the oak bears the closest attention, as already commented upon.

A great deal more is now known about the appearance and structure of the *revestita* larva and how to distinguish it from the five species of *Pedostrangalia* (*Strangalia auctt. Brit.*), outside the scope of this account (Svacha and Danilevsky, 1989), but their morphological information remains incomplete: neither mating, ovipositing nor the egg is described, and the shape of the pupa is un-illustrated.

Hellrigl (*op. cit.*) and Bense (1995) explain precisely in what parts of the host plant the larval and pupal stages occur (see Fig. 1).

The polyphagous larva of *S. revestita* develops preferably in trees on the edges of woodlands and in those isolated in wide areas, such as are found on estates and parks. They feed in the thinner branches, more particularly in those whose bark has been excoriated or otherwise damaged, round the scars of which the parent tree produces an overlapping healing skin; the larva eats into this crust as well as boring into the remaining living part of the branch. When this dies, breaks off and lies rotting on the soil, the larva continues undisturbed; its presence may be detected by the colour of the frass it leaves behind, which turns from a pale to darker brownish shade. It also occurs in decaying tree stumps and fallen dead branches, provided they are still moist. The life cycle lasts from two to three years, pupation taking place in the wood. The imagines emerge usually in April and have been collected as late as August but, as has been related, June seems the most usual month of capture.

Specimens which have been examined and researched are as follows:

- Natural History Museum, London: 4 spp. *in coll.* J.F. Stephens, data-less.
 4 spp. *ex coll.* J.A. Power, *sine datis*.
 1 sp. *in coll.* G.C. Champion, *ex coll.* G.R. Crotch.
 1 sp. *in coll.* G.C. Champion, purchased at a Stevens sale.
 1 sp. presented Tottenham (*supra*).
- Royal Museum of Scotland: 1 sp. *in coll.* G.R. Waterhouse, probably *ex* J.A. Brewer.
 1 sp. *in coll.* G.R. Waterhouse, bought from Brewer, who had bid for it at a Stevens auction in March 1863.
- National Museum of Wales: 3 spp. *ex coll.* A.E. Gardner, without data and doubtfully British.
- Manchester Museum: 1 sp. (A. Ford), *ex coll.* J. Kidson-Taylor.
 1 sp. *ex coll.* T.H. Edmonds, no other data and possibly foreign.
- Hope Dept., Oxford: 2 spp. *in coll.* Dale.
- University Museum, Cambridge: 1 sp. *ex coll.* Rev L. Jenyns.
 1 sp. Darenth Wood (J. Scott) WK (West Kent).
ex coll. O.E. Janson.
 1 sp. "1082" *ex coll.* O.E. Janson. Labelled "Harding collection, sold at Stevens' April 17th, 1873".
 1 sp. *ex coll.* G.R. Crotch, 1844.
 1 sp. *ex coll.* G.R. Crotch.
- Castle Museum, Norwich: 1 sp. *in coll.* J. Edwards, perhaps British, *sine datis*.

Bolton Museum:	2 spp. unlabelled (British?). 1 sp. labelled only "E.C. Rye".
Merseyside Museum:	1 sp. <i>in coll.</i> B.S. Williams, Birch Wood (Fredk. Smith).
Doncaster Museum:	1 sp. "10", but questionably British.
Bristol Museum:	3 spp. <i>in coll.</i> F.C. Adams. Data-less. He was a well-known New Forest entomologist.
Nottingham Museum:	1 sp. <i>in coll.</i> W.W. Fowler, coded "7.91" and with a yellow tag.
Glasgow Museum, Kelvingrove:	2 spp. un-labelled and of unknown origin.
Hunterian Museum, Glasgow:	7 spp. (no data). 1 sp. Brockenhurst, (New Forest) June, 1917.

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